

OLE VIRGINIA TIMES

Renew your OVH membership now!

January 2013

Next Meeting: Monday, January 21, 2013

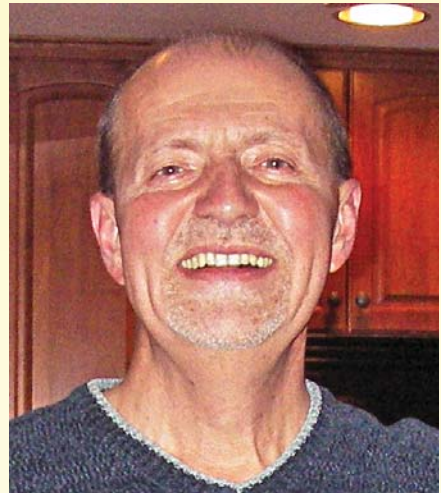
PRESIDENT'S LETTER:

Greetings to all. It's hard to believe we're now into the new year and January is almost over. I would like to remind everyone that nominations for all club officers are now open for the yearly elections to be held during our February meeting.

With that said, most of you know I have served as your President now for six continuous years - which is a relatively long time. During that time the OVH has faced many issues, some involving big money, Federal and local government, and even issues of our own, some of which have posed real threats to us. As a group we came and worked together on each occasion to come up with solutions which worked - in several instances in situations in which the odds initially seemed stacked against us. Despite our internal differences at times, the club has done well and the members are friendly and on good terms with each other.

I am very proud of OVH and the decisions the OVH has made. I have always believed in majority rule; most of the directions we choose - when decisions were required - were done by majority vote of the membership, even though some decisions were not what I personally favored. It comes down to what the membership wants, the principle of managing I have always felt is the most useful for a club like the OVH.

I have given a great deal of thought to whether I should seek another term as your president and have concluded that it is now time for me to pass the baton to a new president - yet to be determined at the upcoming election in February. It has been an honor serving as OVH president for so many years, I thank each of you for your support and friendship. I will step down to open the opportunity for someone else to take the helm as president of the OVH at the February election meeting. At that point I will become again merely a very active regular member of the OVH; my support of the OVH will continue and remain very firm. The OVH always has and will continue to have my full support, I look forward to working with each of you on future events and projects.



Cont'd on Page 3

Ole Virginia Hams Amateur Radio Club, Inc.

Post Office Box 1255
Manassas, Virginia 20108

OFFICERS

| | | | |
|------------|------------------|--------|----------|
| President: | George Tarnovsky | K4GVT | 791-5956 |
| Vice Pres: | Wayne Kline | AG4ZZ | 791-2100 |
| Secretary: | Theresa Heartney | KG4TVM | 257-3566 |
| Treasurer: | Gary Gilham | WG4ARC | 932-1118 |

DIRECTORS

| | | |
|----------------------|--------|----------|
| Don (Butch) Blasdell | W4HJL | 369-2877 |
| Arthur Whittum | W1CRO | 791-4330 |
| Charlie Dale | WA4YGI | 361-3091 |
| Bob Zaepfel | K4HJF | 282-2451 |

WEEKLY FM REPEATER NET COORDINATOR

| | | |
|----------------------------|---------------|----------|
| Thurs - 8:00 PM Local Time | JOHN / KG4NXT | 257-3566 |
|----------------------------|---------------|----------|

HAMFEST 2013

| | | |
|-------|-------|--------------|
| Terry | KC4DV | 571-292-1490 |
|-------|-------|--------------|

FIELD DAY 2013

| | | |
|-------|--------|----------|
| Randy | WB7RAV | 393-1494 |
|-------|--------|----------|

CLUB ROSTER / DATABASE

| | | |
|--------|-------|----------|
| Arthur | W1CRO | 791-4330 |
|--------|-------|----------|

EDUCATION

| | | |
|------|--------|----------|
| Mark | WA4KFZ | 818-8033 |
|------|--------|----------|

CLUB EMERGENCY COORDINATOR

| | | |
|-------------|--------|----------|
| David Meola | KI4AZX | 393-6681 |
|-------------|--------|----------|

ARES - EMERGENCY COORDINATOR

| | | |
|------------------------------------|---|--------------|
| David Lane | KG4GIY | 703-628-3868 |
| email: KG4GIY@ARRL.NET | | |
| Prince William County ARES website | http://pwcares.org | |

FINANCE

| | | |
|--------|--------|----------|
| Arthur | W1CRO | 791-4330 |
| Mark | WA4KFZ | 818-8033 |
| Gary | WG4ARC | 932-1118 |

GENERATORS

| | | |
|-------|--------|----------|
| Steve | N4OGR | 361-0008 |
| Keith | KM4AA | 909-1512 |
| Al | KB4BHB | 368-4794 |

HISTORIAN

| | | |
|---------|--------|----------|
| Theresa | KG4TVM | 257-3566 |
|---------|--------|----------|

WEBMASTER — W4OVH.NET

| | | |
|------|------|----------|
| Paul | W4ZB | 754-0910 |
|------|------|----------|

EMAIL REFLECTOR — w4ovh@googlegroups.com

| | | |
|------------|--------|----------|
| David Lane | KG4GIY | 628-3868 |
|------------|--------|----------|

JOTA

| | | |
|-------|--------|----------|
| Scott | KB8NUM | 365-2642 |
|-------|--------|----------|

LEGAL

| | | |
|-----|-------|----------|
| Bob | K4HJF | 282-2451 |
|-----|-------|----------|

MEMBERSHIP CHAIRMAN

| | | |
|-------|-------|--------------|
| Terry | KC4DV | 571-292-1490 |
|-------|-------|--------------|

NEWSLETTER

| | | |
|------|------|----------|
| Paul | W4ZB | 754-0910 |
|------|------|----------|

NEWSLINE FOR THE WEEKLY NET

| | | |
|---------|--------|----------|
| John H. | KG4NXT | 257-3566 |
|---------|--------|----------|

PROGRAMS

TBA

QUARTERMASTER

| | | |
|-------|-------|----------|
| Steve | N4OGR | 361-0008 |
|-------|-------|----------|

REPEATER CONTROLLERS

| | | |
|--------|--------|----------|
| Keith | KM4AA | 909-1512 |
| Arthur | W1CRO | 791-4330 |
| Butch | W4HJL | 369-2877 |
| Steve | N4OGR | 361-0008 |
| David | KG4GIY | 361-3042 |
| George | K4GVT | 791-5956 |
| Alan | KD4KBX | 330-8844 |
| Russ | WB4HHN | 368-6435 |
| David | KG4GIY | 628-3868 |

W4OVH / W4PVA — TRUSTEE

| | | |
|-------|-------|----------|
| Keith | KM4AA | 909-1512 |
|-------|-------|----------|

SCHOLARSHIP

| | | |
|-----|-------|----------|
| Jim | W4JTP | 392-0150 |
|-----|-------|----------|

SUNSHINE

| | | |
|------------------|--------|----------|
| Theresa (Acting) | KG4TVM | 257-3566 |
|------------------|--------|----------|

TECHNICAL COMMITTEE

| | | |
|--------|--------|----------|
| George | K4GVT | 791-5956 |
| Arthur | W1CRO | 791-4330 |
| Alan | KD4KBX | 330-8844 |
| Bill | N4SV | 590-9562 |
| Butch | W4HJL | 369-2877 |
| Karl | W4KRL | 802-1527 |
| David | KG4GIY | 628-3868 |
| Bob | K4HJF | 335-1939 |
| Keith | KM4AA | 909-1512 |

All telephone numbers listed above are for Area Code 703 unless otherwise noted. This is the official monthly publication of the Ole Virginia Hams Amateur Radio Club, Inc., a §501(c)(3) organization, dedicated to the promotion and enhancement of Amateur Radio. Copyright © 2012 by the Ole Virginia Hams.

The OVH ARC regular monthly meeting is at 7:30 p.m. every third Monday each month at the Prince William County Red Cross Chapter House at 9930 Liberia Avenue, Manassas, Virginia. Members, prospective members and other interested persons are invited to attend. Local information can also be obtained through the OVH's FM repeaters on 146.970-, 224.660-, 442.200+ and 443.500+ MHz or D-Star repeaters on 146.865- and 442.5125+ MHz. Up to date information about OVH activities and its meetings is also available during the OVH's nets on its FM Repeater each Thursday night at 8:00 p.m. or on 80 meters (3710 KHz) LSB each Sunday night at 7:00 p.m. (8:00 pm in Summer) or through the OVH's web site at <http://w4ovh.net>

Articles and quotations in the OVH Times newsletter may be reprinted if credit is given to the OVH ARC and any other noted source. Proposed materials for publication including pictures, articles, letters to the editor, classified ads, notes about specific errors, complaints or the like are solicited from all readers. Forward such items to the OVH Times Newsletter Editor: PAUL@W4ZB.COM as soon as available at any time, but the cutoff deadline for the OVH Times each month (usually the second Monday of the month) may preclude publication/correction until the following month.

Approx. Circulation - 170.

Last Rev: 1/15/2013

I remind everyone again that it is time for renewal of your OVH club membership for 2013. Renewal Forms are posted on the W4OVH.NET web site under Membership Application and a renewal form is included later in this newsletter. Print out the form, fill it in, and then mail it in or bring it to the next meeting. It is also now possible to renew your membership online.

Terry / KC4DV again been very much on top of leading the preparation for the 39th Manassas Hamfest to be held on Sunday, June 9, 2013! The third meeting of the Hamfest Committee was held on January 9th and was well attended. Any member may attend these meetings - check your email from the OVH's closed email reflector for more information.

I hope all can attend the upcoming OVH meeting on Monday, January 21st at 7:30 PM!

73 George K4GVT

Sunshine Corner:

Happy New Year! Welcome to 2013!

We already have a lot on our calendar for the coming year, so we hope to see you at the different events. Come as you are or bring all your gear! Information on different events can be found on our web site, at the monthly meetings, on the club reflector and right here in the Sunshine Corner. This is your club, participation is the key!

I have been on a bit of a break from the Sunshine Corner but I'm ramping back up to be able to do this every month, don't quite have the full list of birthdays yet, hope to have all that ready for next month. If you have a birthday in January, very happy birthday wishes to you - the following birthday list is from 12 months ago: Justin / KJ4LAS, Dan / K9POO, Elizabeth / KG4NXV, Randy / WB7RAV, Charles / W4XP, Milt / N4SN, Woody / N4MQ, Alan / WA2GTT and Harold / K4OPS.

Congratulations to George K4GVT and his wife Ev on the engagement of their daughter Tanya over the Christmas holidays, wedding bells will be ringing soon!

Best wishes for a full recovery to Erica, David's KI4AZX wife who was under the weather a month ago.

Hamfest (Terry / KC4DV) and Field Day (Randy / WB7RAV) meetings are being held monthly; if you can lend a hand please let the chairperson know.

I just can't say thank you enough to everyone who contributed to the Toys For Tots campaign at our party, it was a great effort on everyone's part and definitely made a difference for some of the kids in our area.

If you have news, good or bad, for the sunshine corner, please email to kg4tvm@hotmail.com or call me at 703-257-3566.

73 Theresa KG4TVM

Minutes of the Ole Virginia Hams Amateur Radio Club Meeting December 19, 2012:

George K4GVT called the meeting to order at 7:30 pm. Meeting was held at the Prince William County Red Cross Chapter House in Manassas, Virginia.

Following the Pledge of Allegiance, George / K4GVT called for a moment of

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silence for the victims of the shooting in Connecticut.

All present stated their names and call signs. There were 28 OVH members and 3 guests.

George / K4GVT thanks Gary / WG4ARC and Theresa / KG4TVM for making the arrangements for the successful holiday party in December.

BUSINESS MEETING

Minutes from the November meeting were approved as read.

Treasurer's report – by Gary / WG4ARC approved as read. Gary provided a for a URL at which membership dues and renewals could be paid online.

Membership – Terry / KC4DV read in the new applications of Baofang Shan / KK4JFK and Laura Campbell / KK4MXS. Lillian / KK4MXY was voted in as a new member.

Training – Mark / WA4KFZ is working on setting up a General Class licensing preparation class for March; he also met with the Civil Air Patrol in Leesburg and is trying to put together a class of 30 there; George / K4GVT thanked Mark for his work

Hamfest – Terry / KC4DV reported that hamfest is on schedule; next Hamfest Committee meeting will be on January 9th at Panera on Liberia Avenue at 7:00pm, dinner at 6:00pm.

Field Day – Randy / WB7RAV held his first Field Day committee meeting last week and will have another meeting in January; he posted a signup sheet for operating; Keith / KM4AA will put the radio operating manuals on all of the laptops in 2013; George / K4GVT asked for a show of hands for members who favored relocating Field Day for 2013 back to the previously used Nokesville Park location, a majority wanted Nokesville.

Sunshine – Theresa / KG4TVM thanked the members for contributing to Toys for Tots at the holiday party earlier in December, great participation.

Webpage – Paul / W4ZB reported site is working without known problems, still many improvements are needed, anyone who wants changes, corrections or additions, please email the specifics. Links will be posted on the Membership Application for paying membership dues and renewals online.

JOTA – Scott / KB8NUM reported that 2013 JOTA event will be next October

George / K4GVT reminded everyone that OVH Club officer elections are coming up and will be held at the February 2013 regular meeting.

Old Business – Art / W1CRO announced that the finance committee has received the budget and will present it at the next meeting; Joe / KI4OHR suggested that the OVH purchase any new radios by January 1st because the prices will be going up and his last day at HRO is December 29th.

AREA – Steve / N4OGR thanked members for helping at the Manassas Park parade; Steve also asked about hams becoming CERT trained and he will recommend that CERT members become hams.

BREAK

50/50 Emmett's wife Sharon won \$10.

Terry / WA5NTI announced that he has people coming to his house on Wednesday for a demonstration of JT65; Terry / WA5NTI has been voted to be a director at AMRAD, he will push for issues to be researched by AMRAD just let him know.

Meeting adjourned at 8:25 pm

Reminders about some upcoming events / calendar dates:

HAMFESTS:

Saturday, February 2, 2013 - Richmond Frostfest, Richmond, Virginia. See the Frostfest flyer later in this newsletter and more details at <http://frostfest.com>

Sunday, February 24, 2013 - Winterfest, Vienna Wireless, at Northern Virginia Community College, Annandale, Virginia. See the Winterfest flyer later in this newsletter.

Saturday, April 6, 2013 - Greater Baltimore Hamboree and Computerfest, Timonium, Maryland. See <http://gbhc.org> for more information.

Thursday, May 16, 2013 - Contest University, Dayton, Ohio - one very full day (7:00am- 5:00pm) just before the Dayton Hamvention starts; this excellent program is taught by the best instructors anywhere. See <http://contestuniversity.com> for details and registration information. Recommended!

Friday - Sunday, May 17 - 19, 2013, Dayton Hamvention, Dayton, Ohio. For full details, go to <http://hamvention.org>

Sunday, June 9, 2013 - The Manassas Hamfest will be put on by the OVH for the 39th time. Reserve this date. More information will follow.

OPERATING EVENTS AND CONTESTS

Tuesday, January 1, 2013 - ARRL Straight Key Night. See <http://www.arrl.org/straight-key-night> for full details.

There are many operating contests almost all of the time. The excellent web site maintained by WA7BNM at <http://www.hornucopia.com/contestcal/> lists most of them!

PUBLIC SERVICE / TRAINING / ARES EVENTS

Saturday, January 19, 2013 at 09:00 at the Prince William County EOC - Training Event. Check the web site below or with David / KG4GIY for more information.

Check the online Calendar by David / KG4GIY at <http://www.pwcares.org> for latest updates. David maintains a comprehensive calendar for upcoming events at that web site. Complete direct contact information for David appears on page 2 of this Newsletter.

OVH Club Officers, Office Holders and Directors - Who Will Be Next?

In the President's Letter at the beginning of this newsletter, George / K4GVT announces that he will not run again this year for office as President of the OVH. George has held that position for six years - which is a long time to hold a such volunteer leadership role! George floated this same idea about two years ago, but a determined group approached him and urged him to stay on as President and he agreed to run again. Almost all OVH members agree that George has done a great job.

A major responsibility of all of officers, directors and office holders, individually and collectively, in an organization like the OVH is to line up and assure good continuity of leadership for their successors. Hopefully all long serving directors or office holders who do not seek reappointment or officers who do not intend to seek re-election will solicit and stimulate interest in at least two members whom they believe to be well qualified to serve as a successor, with an enthusiastic interest level and the time available to take over as a successor, but who may not have given any thought about stepping forward to take on such responsibility if elected or appointed. That needs to be done, not to create factions, contested elections or disputed appointments, but rather to be sure that the best qualified and available individuals know that they are needed. Indeed, every OVH office holder who is planning to resign or seeking to pull out from responsibility previously

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undertaken should identify and solicit one or more successors and motivate them to volunteer for the position which is about to become vacant.

In self-perpetuating organizations (like the OVH), the best successions often occur when they are at least carefully considered or pre-planned, and potential successor(s) have been cultivated and prepared for the undertaking. All OVH members should be concerned about this, and all should be willing to consider filling an office or accepting an appointment for which they may be qualified. This is an important enough job for the future of the OVH, that adequate forethought and time to consider carefully is needed in order to be sure the OVH obtains the best successor officers, office holders and directors.

Some Possibly Useful Information

1. We reported last month that an ongoing ITU / UN conference of its 193 member countries in Dubai was about to approve an ITU treaty amendment which would allow the ITU to assert full authority to control the operation of the Internet, not only its technical foundation and operation, but also all other potential regulatory aspects, including restrictions on its users. As anticipated, the amendment was approved by an overwhelming majority of the 193 country members, but delegates from the U.S., the U.K., Canada and several other countries walked out, refusing to approve. It is expected that about 20 ITU country members will refuse to sign the new treaty - which, therefore, will not be binding upon them (as to the changes made by the amendment), but the amended treaty will become effective in 2015 for all other members who have signed it.

2. Following is an updated short list of “free,” high quality online educational courses web sites (“http://” omitted in the listings). The word “free” is in quotes here because anyone who has ever pursued independent study knows that a substantial commitment of time and effort is necessary for serious learning; thus, “free” here only connotes that “no payment is required” for the user to access the educational resources.

- a. khanacademy.org - high school, college SAT prep and beginning college level courses
- b. udacity.com and coursera.org - Internet start-ups - beginning college level courses
- c. oyc.yale.edu - an assortment of course taught at Yale University
- d. edx.org - selection from MIT, Harvard, Berkeley, University of Texas, Wellesley and Georgetown
- e. ocw.mit.edu - a very large selection from courses taught at MIT
- f. meted.ncar.gov - earth / atmospheric / solar sciences, meteorology, some specifically radio related

Check these out, expand your brain and learn something new or refresh your knowledge in a subject that you used to know!

3. Following is a short update of ham radio related webinar sites:

- a. pvrc.org/webinar/webinars.htm - excellent assortment of topics by the Potomac Valley Radio Club
- b. amateurlogic.tv - many ham radio and electronics related “tv” type presentations
- c. wwrof.org - fairly new - World Wide Radio Operators Foundation - have some excellent items.
- d. youtube.com - use youtube search with ham radio topic keywords - lots of stuff, very good to junk.

4. Electronic publishing has arrived in the Ham Radio domain; this is not exactly new, but electronic publishing for the major ham radio publications now seems to be expanding rapidly. The ARRL has recently released a “free” iPad application for QST for ARRL members; while I still prefer reading the printed version, the iPad edition works very well, corresponds to the printed version but with much better color, allows you to store and carry back issues of QST on your iPad, and has a few features not available in the printed version (active links to additional material). CQ now has all of its publications available in electronic form in addition to its printed versions, separate charges for each version.

Open Source Digital Voice for Ham Radio - is it here at last?

FREEDV.ORG is a quite new web site (12/2012, registered in Australia) operated by an international group of hams who have been working for some time developing open source digital voice systems for Ham Radio - primarily HF radio operation.

The group is now offering a somewhat buggy (they admit), but working “freeware” software for Windows computers (Linux, etc. to come shortly, they say) which allows digital voice operation on HF using digital modems with an SSB transmitter/receiver. The digital modems they have implemented uses multiple subcarriers and require a total bandwidth of less than 1200 Hz. Much of the programming work has been done in the U.S. and Australia but the design has been contributed to by a wider international group of expert hams.

The continued work of this or similar groups is likely to be a key to the future of digital voice operation on the HF bands. One of the primary objectives of the freedv.org group is to make their work completely open source to avoid ham user objections to adoption of proprietary digital voice systems which can only communicate with other proprietary systems using equipment from the same manufacturer. D-STAR from Icom, while somewhat successful and relatively widely deployed, is an example of a (mostly) proprietary digital voice system.

While the use of digital voice requiring only narrow bandwidths for transmission has become widespread since the mid-1990's with the development of digital voice based cellular telephony, that widespread adoption has not yet reached ham radio because hams resist adoption of proprietary systems such as are used with cellular telephones. Obviously, the ham market is very, very small compared to the cellphone market, and the competitive factors are very different; many hams simply do not want to be tied down to using equipment available only from a particular manufacturer which is only able to communicate with other equipment from that same manufacturer.

The design and operation of a digital voice system for ham radio must address two very distinct aspects: first are the procedures and algorithms for efficiently encoding an analog voice signal into a digital voice sequence (signal) and then the reverse procedures and algorithms for decoding a digital voice sequence (signal) into an analog voice signal. Second are the procedures and algorithms to be used in a digital modem to encode the digital voice sequence (signal) into an signals suitable for transmission over an analog HF channel, and for decoding received analog signals from the HF channel back into digital voice sequence (signals), possibly with some automatic error correction coding / decoding algorithms also implemented in the modem. Of course, a working system must also address the relatively mundane procedures for switching between transmit and receive.

Virtually every aspect of such a design is very specific in the particular details used; this means that useful digital voice HF QSOs will never be possible between two ham stations unless both hams are using digital voice systems which use the same (or compatible) procedures and algorithms at the fine detail level. Fortunately, many open source and non-proprietary approaches are available for to fill in these details. The big advantage of an open source software based digital voice system is that the specific procedures and algorithms used can be readily inspected (by those who have the skills to evaluate source code) and changed or improved with relative ease based upon operating experience (again, by those who have the knowledge and skills).

Hopefully, this will eventually lead to improvements in ham radio digital voice systems similar to what has occurred with ham radio based digital character modes. RTTY has been around in ham radio since the early 1950's. In the early 1980's RTTY migrated from “heavy iron” hardware based teletype machines to software based systems. In the early 1990's the very efficient and innovative PSK31 system was developed as a completely software based system which in many ways is superior to RTTY for character based ham communications on HF. Then as more software developers got into the fray, there has been an explosion of other character based digital modes and systems, with the evolution and improvements still continuing today. Hopefully, the same thing - progress and improvement - will occur with open source digital voice.

You should check out the freedv.org web site to learn more!

Thanks to Milt / N4SN for bringing this to our attention just before the deadline for this newsletter.

RE M I N D E R



Yes, it is that time of year again!!!! Below is the 2013 Renewal Application.

Please fill out the form below (for database), attach your check and mail to the address below or drop off at a meeting. Be sure to update all information, including your e-mail address, telephone number(s) and nine digit ZIP

MEMBERSHIP RENEWAL APPLICATION "OLE VIRGINIA HAMS AMATEUR RADIO CLUB" 2013

NAME: _____

ADDRESS: _____

CALL SIGN: _____

Home Tel: _____

Cell Tel: _____

Work Tel: _____

EMAIL: _____

BIRTHDAY: _____

ARE YOU PRESENTLY AN ARRL MEMBER? (YES/NO)

ARE YOU A VOLUNTEER EXAMINER: (YES/NO)

MAY YOUR TELEPHONE NOS. BE LISTED IN THE "Members Only" OVH ROSTER? (YES/NO)

WHAT IS YOUR PRESENT LICENSE CLASS? _____

Dues are now **\$20.00** per year and payable on January 1, 2013. Dues for each additional family member living at the same mailing address are \$10.00. Dues for a full time student at the college undergraduate or lower level [list school attended and grade or level: _____] are \$10.00.

AMOUNT ENCLOSING: _____

NAME AND CALL OF FAMILY MEMBERS:

Name: _____

Name: _____

Call: _____

Call: _____

Return to: **Treasurer, OVH**
P.O. Box 1255
Manassas, VA 20108-1255

FROSTFESTSM 2013



Sat. Feb. 2, 2013

at the



RICHMOND RACEWAY COMPLEX

Presented by the Richmond Amateur Telecommunications Society

Virginia's Largest Winter Hamfest!

Featuring Manufacturer's Reps from YAESU, ALPHA, FLEX RADIO, ELECRAFT, HILBERLING, many others!
\$1000 Grand Prize Drawing, \$250 Earlybird Drawing,
Forums and Seminars, DXCC Card Checking,
and so much more!



ARRL
Virginia
State
Convention

For more information:
Keep reading, or visit
<http://www.frostfest.com/>
Email: info@frostfest.com

WINTERFEST!™

THE NATIONAL CAPITAL AREA HAM RADIO FAIR

- Ham Radio, Electronics, and Computer Parts, Pieces, and Paraphernalia
- Large Indoor Exhibit Area
- QSL checking for WAS, DXCC, VUCC until Noon
- 150 Paved Tailgate Spaces (\$15 for one space—includes one admission)
- Improved and expanded loading dock!
- FREE On-Site Parking

TAILGATING!
Tailgate area opens at 6AM

When: Sunday, February 24, 2013

**Where: Northern Virginia Community College
Annandale Campus
833 Little River Turnpike
Annandale, VA
38.833216° N, -77.236872° W**



Cost: \$6.00 per person

**Talk-In 146.91 MHz FM
Courtesy of NVFMA**

Indoor Exhibit Area Opens to the Public at 8AM

Book your tables Online!

Vienna Wireless



Society

General Info - Jack, AI4SV
Winterfest2013@viennawireless.org
(314) 266-8426

Tables Sales - Doug, AK4AO
Tablesales2013@viennawireless.org
(703) 698-6158

<http://www.viennawireless.org/winterfest.php>